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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,445	09/25/2003	Jae Kyum Kim	K-195B	4238
34610	7590	09/30/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			COMPTON, ERIC B	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/669,445

Applicant(s)

KIM ET AL.

Examiner

Eric B. Compton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/624,144.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1- 3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. 5,150,589 to Williams et al.

Regarding claim 1, Williams discloses a method of forming a washing machine, comprising:

attaching a bearing housing (8) to a rear wall (3) of a tub of the washing machine by injection molding the rear wall of the tub around the bearing housing, see Col. 3, lines 2-3 (disclosing tub 3 is formed by injection molding); Figure 2 (shows bearing housing 8 having keyed surface to engage with injection molded tub);

attaching a stator (31) to the rear wall of the tub;

inserting a shaft (13) through the bearing housing; and

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attaching a rotor (52) to a first end of the shaft.

Regarding claim 2, as shown in Figure 2, there is at least one bearing in the bearing housing in which the shaft is inserted and mounted.

Regarding claim 3, as shown in Figure 1, drum (4) is rotatably mounted in the tub (3) and attached to the second end of the shaft.

Regarding claim 8, as shown on Figure 2, portions (92) of the rotor are bent inward forming apertures. This inherently forms cooling fins, by increasing the surface area of the rotor to exchange heat.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 5,150,589 to Williams et al in view of DE 4335966 to Oltmanns

Williams discloses the invention cited above. However, the reference does not disclose the particulars claimed regarding the rotor.

Oltmanns discloses a washing machine similar in constructions to Williams. The machine includes a rotor assembly (3) attached to a shaft (7) assembly by a connector (99). See Figures 4-5.

Regarding claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have attached the rotor of Williams to a connector, light of the teachings of Oltmanns, in order to allow for different magnet sizes using the same shaft diameter. See *also* U.S. Pat. 5,778,703 (showing rotor magnets connected to rotor body with pins).

Regarding claim 5, as shown in Figure 4 of Oltmanns, the rotor is keyed to the shaft.

Regarding claims 6-7, as shown in Figure 5 of Oltmanns, the rotor is connected to the connector by what appears to be fasteners (no reference) which could be considered pins.

#### ***Allowable Subject Matter***

5. Claims 9-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 16-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a method of forming a washing machine as claimed, and in particular including the steps of "attaching a bearing bracket to the rear wall of the tub such that the beating bracket covers the rotor; mounting a rear bearing in the bearing bracket; attaching a bearing bracket to the rear wall of the tub such that the beating bracket covers the rotor; and mounting the first end of the shaft in

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the rear bearing such that the stator and rotor are positioned between the rear bearing and the rear wall of the tub."

The bearing bracket (9) and rear bearing (6b) are shown in Figure 9.

### ***Prior Art References***

The prior art references listed on the enclosed PTO-892, but not used in a rejection of the claims, are cited for their teachings of assembling washing machines.

U.S. Pat. 6,681,602 to Heyder discloses a very similar invention. However, due to a later effective filing date, the reference does not constitute prior art.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (571) 272-4527. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David p. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric B. Compton  
Primary Examiner  
Art Unit 3726

ebc